



AROW20s08/1

Wind Farms



This advisory statement replaces the Society's previous advice note on wind farms. The British Horse Society supports the Government's Renewable Energy Strategy which requires 15 percent of all the UK's energy needs to come from renewables by 2020.

The statement gives advice to developers, councils, horse riders and carriage drivers as to the safety implications for horses and their riders or drivers arising from the construction and operation of wind turbines in the vicinity of routes for riding and/or driving horse drawn vehicles. This advice deals with large commercial turbines. However, the Society advises that the recommended separation distances in its revised policy should apply to all wind turbines.

This statement gives advice to ensure that the safety implications for horses and riders, carriage drivers and other users of rights of way and the road network are taken into account and addressed in the determination of planning applications for wind farms.

The Society normally restricts itself to commenting on the safety implications for equestrians and rarely com-

ments on either the aesthetics or economics of turbines.

While the Society accepts that the wind industry has a good safety record, there have been some significant structural failures in respect of wind turbines, for instance:

- 8 November 2007: Structural failure of a 63-metre tall wind turbine bent in two at Beinn an Tuirc Windfarm in Scotland, resulting in its partial collapse.
- 11 May 2007: Test mast blown down at Cunninghill, Scotland
- 25 February 2007: Blade snap Llanmiloe Wales
- 23 December 2005: Turbine fire Nissan Car factory Sunderland

The Society expects developers to demonstrate in the planning application process the steps they have taken to protect the public from any such incidents.

Many riders and carriage drivers are reluctant to take their horses near wind turbines. There are varied reports from those who do. Some report initial signs of fear, which either become magnified as they approach the turbines, or diminish as the horse discovers no or little threat.

The Society believes that horses may react adversely to the following:

Blade Shadows

In sunshine the rotors of a wind turbine will cast a shadow on the ground which the horse is being asked to cross and this may frighten some horses. These shadows can affect ground a considerable distance from the turbine at certain times of day or year when the sun is very low. Blade shadows are not a problem if the turbine is to the north of the right of way or road.

The Society expects developers to provide, as part of the planning application, details of the extent of shadow throw.

Blades starting to turn

Blades that start to turn while in a horse's sight line may upset the horse. If a turbine appears at 'eye level' it may upset the horse.

Noise levels from turbines

The following table reproduced from P168 of the *Technical Annex – Wind of Planning for Renewable Energy in the Companion guide note to PPS22 (Planning Policy Statement 22: Renewable Energy)* www.communities.gov.uk/documents/planningandbuilding/pdf/147447 compares noise generated by wind farms with everyday activities.

Table 1

Noise generated by wind turbines compared with other everyday activities

Source/Activity	Indicative Noise Level dB(A)
Threshold of Pain	140
Jet aircraft at 250m	105
Pneumatic drill at 7m	95
Truck at 30 mph at 100m	65
Busy general office	60
Car at 40 mph at 100m	55
Wind farm at 350m	35-45
Quiet bedroom	20
Rural night-time background	20-40
Threshold of hearing	0

Recommended good practice on controlling noise from wind turbines is set out in 'The Assessment and Rating

of Noise from Wind Farms' (ETSU for DTI 1997) and states:

'The current practice on controlling wind farm noise by the application of noise limits at the nearest noise-sensitive properties is the most appropriate approach.

Noise limits should be applied to external locations and should apply only to those areas frequently used for relaxation or activities for which a quiet environment is highly desirable.

Noise limits set relative to the background noise are more appropriate in the majority of cases.

Noise from the wind farm should be limited to 5 dB(A) above background for both day- and night time, remembering that the background level of each period may be different.'

The Society expects developers to provide, as part of the planning application, details of the indicative noise levels dB(A).

Snow and Ice falling off blades

The Society expects developers to provide, as part of the planning application, details of the mechanisms that will be installed to ensure that turbines will stop automatically when blades become encrusted with ice, and the distance that snow and ice will be thrown when the blades start up again.

Assessment and Construction period

The assessment and construction period of wind farms can have safety implications for all highway users, especially equestrians, and appropriate measures need to be taken to address these.

Planning Applications for Temporary Anemometers

The Society recommends that no anemometer should be situated closer than fall over distance plus 10 percent from a bridleway, byway, restricted byway, public road or other public route used by equestrians and that no associated cables should be situated any closer than 30 metres from an unfenced road, bridleway, byway, restricted byway or other public equestrian route, as the cables can be difficult to see, especially for a startled horse.

Construction and Maintenance

The construction period of a wind farm can last for months and may generate significant HGV and non-HGV traffic movements.

The Society expects developers to provide, as part of the planning application, details of:

- The length of the construction period
- The number of vehicular movements during the construction and maintenance periods
- The route of vehicular movements
- Any engineering works to be carried out on the surrounding road network to cater for the construction and maintenance traffic

If any such works will involve:

- Widening of narrow lanes – the Society will expect the developer to do this by strengthening the verge and then re-grassing it to the original width so that the result is not a widened lane that will increase traffic speeds
- Altering junctions, corners and bends to accommodate the low-loaders – the Society will expect the developer to ensure that the final layout will not disadvantage equestrians by removing wide verges on which they wait to cross roads.

The Society does not expect any bridleway or byway to be tarmaced.

potential layout, a separation distance of four times the overall height should be the target for National Trails and Ride UK routes, as these are likely to be used by equestrians unfamiliar with turbines, and a distance of three times overall height from all other routes, including roads, with the 200m recommended in the Technical Guidance to PPS 22 being seen as the minimum, where it is shown in a particular case that this would be acceptable. The negotiation process recommended in PPS 22 should indicate whether, in the particular circumstances of each site, these guidelines can be relaxed or need strengthening to minimise or eliminate the potential difficulties.'

Where the recommended separation distances cannot be achieved, the Society will expect the developer to demonstrate:

- How safety issues can be addressed by carrying out agreed works
- Details of an alternative route that could be used by equestrians whose horses will not use the existing route because of the closeness of the turbines to the road or right of way
- Details of the provision of funds to improve other rights of way; or to create new routes in the locality

Planning Policy Statement 22 Renewable Energy

Planning Policy Statement 22 on Renewable Energy, at p172 of the *Technical Annex – Wind of Planning for Renewable Energy – a companion guide to PPS22*, published in 2004, states:

"56: The British Horse Society, following internal consultations, has suggested a 200 metre exclusion zone around bridle paths to avoid wind turbines frightening horses. While this could be deemed desirable, it is not a statutory requirement, and some negotiation should be undertaken if it is difficult to achieve this."

"57: Similarly, there is no statutory separation between a wind turbine and a public right of way. Often, fall over distance is considered an acceptable separation, and the minimum distance is often taken to be that the turbine blades should not be permitted to oversail a public right of way."

The British Horse Society Policy

In 2007 The British Horse Society reviewed its wind farm policy in respect of separation distances of wind turbines from roads and public rights of way

The Society's current policy is

'That, as a starting point when assessing a site and its

Planning conditions

If planning permission is granted, the Society will expect the Local Planning Authority to impose planning conditions to address the following situations, in order to reduce the impact of the development on users of public rights of way.

- 1 That any work affecting a public right of way will only take place with the approval of the Highway Authority.



- 2 Where it is proven that there is no alternative to using the line of a bridleway or byway as the access route, the bridleway or byway should be widened to allow the vehicles to be fenced off from the bridleway or byway. All vehicles should be required to slow down or stop when meeting rights of way users, particularly horses.
- 3 If construction traffic has to cross an equestrian route, this should be done at right angles, with warning notices for both vehicle drivers and equestrians. The construction traffic should give way to the users of the public right of way.
- 4 If it is necessary to close a public right of way at any time while large turbine components are brought on site, this should only take place when the relevant Temporary Traffic Regulation Order has been made.
- 5 To restrict usage of bridleways and byways by HGVs to ensure that equestrians can ride and carriage drive safely in the early morning, in the evening, at the weekend and on bank holidays.



Equestrian Public Rights of Way are Bridleways, Byways Open to All Traffic (BOATS) and Restricted Byways (RBs). Reference in this document to Byways includes BOATS and RBs.

Equestrian routes also include Unclassified County Roads, ORPAs (Other Routes with Public Access), Permissive Routes, Designated Horse Rides in Public Open Spaces, Toll Rides, some Countryside and Environmental Stewardship Schemes, commons, beaches and estuaries.

Under the Land Reform (Scotland) Act 2003, riders and carriage drivers have a right of responsible access. This includes access into wind farm areas, although the specific information applies to England and Wales only, the general guidance also applies in Scotland. In Scotland SPP6 and PAN81 could be used as advice. For information, please consult the BHS Access Officer for Scotland:

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